

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the following comments.

Applicants invention concerns a digital broadcasting receiver which is capable of receiving high definition broadcasting or standard definition broadcasting.

More particularly the invention is addressed to a time when a high definition broadcast is terminated and switched to standard definition broadcasting on the same channel. Because a high definition broadcasting occupies a single channel and subsequent termination frees several sub-channels, a user is required to select a sub-channel of the standard definition broadcasting. The display of such sub-channel, in the prior art, is in the form of divided windows having static images with the user being required to select the sub-channel while looking at the divided windows on the screen.

The present invention improves the useable of such a system when high definition broadcasting is switched to multi-channel standard definition broadcasting. A transport unit 30 separates digital broadcasting signals after they have been demodulated and a detecting unit detects whether there is one-channel broadcasting (HD) or multi-channel broadcasting (SD) based on a packet (ID) which is included in the digital broadcasting signal. A sub-channel control unit 81 controls the transport unit 30 so that when the broadcasting detecting units detects multi-

channel broadcasting, a broadcasting signal is output from the sub-channel control 81 which broadcasting signal includes "a predetermined packet ID". There are two packet ID's involved. One is the packet ID included in the digital broadcasting signal and the other is the "predetermined packet ID" output from the sub-channel control unit. This predetermined packet is discussed at the bottom of page 6 and the top of page 7 of the application and includes information concerning the sub-channel held by the storage unit 83. As indicated, also at page 6, when the operating mode switches to a sub-channel setting mode after the mode setting switch key 902 is pressed in the remote, that data is stored in RAM and input via the sub-channel selected key 905.

Claims 1 and 4 have been rejected under 35 U.S.C. 102 as anticipated by the reference to Birch et al. U.S. Patent No. 5,583,562 with claims 5 and 6 being rejected under 35 U.S.C. 103 as unpatentable over the same reference to Birch et al.

Applicants respectfully submit that independent claims 1, 5 and 6 provides structural and method limitations which are not shown or disclosed by the reference to Birch et al. The reference to Birch et al. U.S. Patent No. 5,583,562 is a system for multiplexing a plurality of digital services. The demultiplexer 156 outputs data streams to various output ports by way of packets with the sequence of packet data including low speed data, medium speed data and high speed data. The high speed data portion relates to video whereas the medium speed data relates to audio. In the video packet a HDTV flag bit is used to indicate high definition video output

which is used to switch a HDTV receiver display from standard to high resolution processing mode or vice versa. This is shown in Figure 6 with an HDTV flag output of video processor 630.

Applicants submit however that this packet corresponds to the “packet ID” of claims 1, 5 and 6 which is included in the digital broadcasting signal. However, Birch et al. has no corresponding “predetermined packet ID” output from a transport unit when the broadcasting detecting unit indicates multi-channel broadcasting. In other words, the digital broadcasting signal of Birch et al. contains a header indicating HDTV operation and the information is then used to turn on the HDTV receiver or to turn it off, whereas the present invention responds to the detection of multi-channels standard definition or high definition by having a broadcasting signal which includes a “predetermined packet ID” being output.

This structure or function specified in each of independent claims 1, 5 and 6 is not shown in Birch et al. and there is no reason why such predetermined ID packet would be output. In the present invention, this predetermined ID packet contains information corresponding to the sub-channel held by storage unit 83, as explained on page 6.

New claims 7 and 8 correspond to a combination of claims into independent form containing the previously allowable subject matter of claim 2.

Therefore in view of the distinguishing features between the claimed invention and the reference to Birch et al. as defined by each of independent claims

1 and 5, Applicants respectfully request that this application containing claims 1, 3-8 be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038849.47927US).

December 8, 2003

Respectfully submitted,

  
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